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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,864

10/19/2005

Serge Le Cocq

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27799

7590

10/13/2009

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EXAMINER

SAAD, ERIN BARRY

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

10/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,864	Applicant(s) LE COCQ ET AL.	
	Examiner ERIN B. SAAD	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-18 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 15, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/4/2009 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 7-9, 15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bienek et al. (4,738,388) in view of Schroeder et al. (4,673,814).

Regarding claim 1, Bienek discloses a method of producing a closed container with a tight and mechanically strong seal by fastening together a metal body 1 having a central axis (shown below) with a shape that is of cylindrical, said body having an open top axial end, a closed bottom end, and a base with at least one axial wall between the open end and the closed bottom end and being parallel to said central axis (shown below and figures 1-2 and column 5 lines 38-43).

The drawing (figure 2) of Bienek shows a slight angle at the end face where the weld is located. However, Bienek does not specifically disclose that there is an angle located at the weld location. It is the Examiner's position that since there is no description of the end face in the specification, it is not crucial to the invention. It is the Examiner's position that the end face is parallel to the closed bottom end and the slight angle is created by the weld material. When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value. See *Hockerson-Halberstadt, Inc. v. Avia Group Int 'l*, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000) (The disclosure gave no indication that the drawings were drawn to scale. "[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue."). However, the description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in the art. In re Wright, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977) (MPEP 2125)

Bienek discloses that the at least one axial wall having an end face parallel to and opposite the closed bottom end and a metal cover having an axis coaxial with said central axis of said body and at least one end wall parallel to said central axis to be positioned at said top axial end of said body facing said at least one end face of the axial wall of said body (shown below and figures 1-2). Bienek discloses following two steps in succession, carried out in a hostile environment (radioactive waste; column 1 lines 5-11): docking said body 1 and said cover 9 so that said end face of the axial wall

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of said body in the vicinity of said open top thereof and said end wall of said cover face each other and are maintained in contact; and producing a continuous penetrative weld over an entire thickness of the end face of the metal body and an entire thickness of the at least one end wall of the metal cover and about an entire periphery of said cover and said body at the ends of their respective walls which are maintained in contact (figures 1-2, shown below and column 4 lines 41-66).

Bienek does not specifically disclose that the method is carried out by remote control. However, Schroeder discloses the use of a remote controlled fillet welding operation for sealing radioactive material in a container (column 3 lines 52-60). To one skilled in the art at the time of the invention it would have been obvious to use a remote control for carrying out the method of sealing a container holding radioactive waste to prevent human contact with the radioactive waste during the welding process.

Regarding claim 2, Bienek discloses that the first step comprises a guided approach of said cover and said body, a docking guide being arranged in the internal structure of one of said cover and said body (shown below and figures 1-2).

Regarding claim 3, Bienek discloses exerting a force on at least one of the ends of the walls of said body and said cover to thereby maintain said body and said cover in contact during welding (column 1 lines 50-66). Bienek discloses a weld seam, but does not specifically disclose that the weld is produced without spot welding. However, to one skilled in the art at the time of the invention it would have been obvious to not use spot welding to ensure a continuous seal to create a leak proof container.

Regarding claim 4, Bienek discloses that the weld is produced without a filler metal (column 3 lines 47-49).

Regarding claim 7, While Bienek does not mention the position of the vessel during welding, to one skilled in the art at the time of the invention it would have been obvious to have the vessel in the vertical position to prevent the radioactive contents in the container from leaching out.

Regarding claim 8, Bienek does not disclose that the container is fixed and the welding head is rotated around the container at the level of the ends of the walls maintained in contact. However, Schroeder discloses a remotely-controlled programmed robot and automatic welding equipment which would allow the welding head to be rotated around the said container at the level of the ends of the walls maintained in contact (column 3 lines 27-60). To one skilled in the art at the time of the invention it would have been obvious to keep the container fixed and move the weld head around the container to prevent movement of the radioactive material in the container and to prevent movement of the lid and body during the welding process.

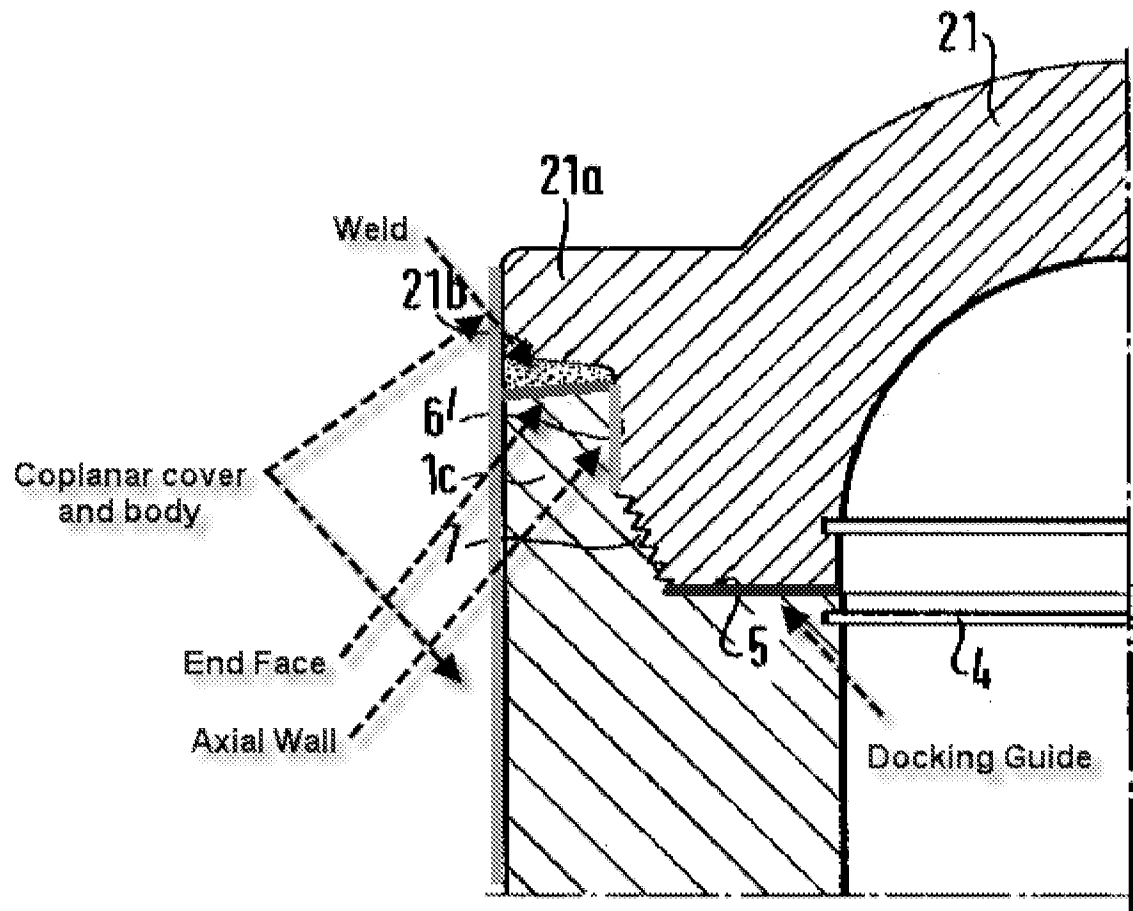
Regarding claim 9, Bienek discloses that the method is carried out to produce a closed container for confined packaging and storage of hazardous waste (column 1 lines 5-10).

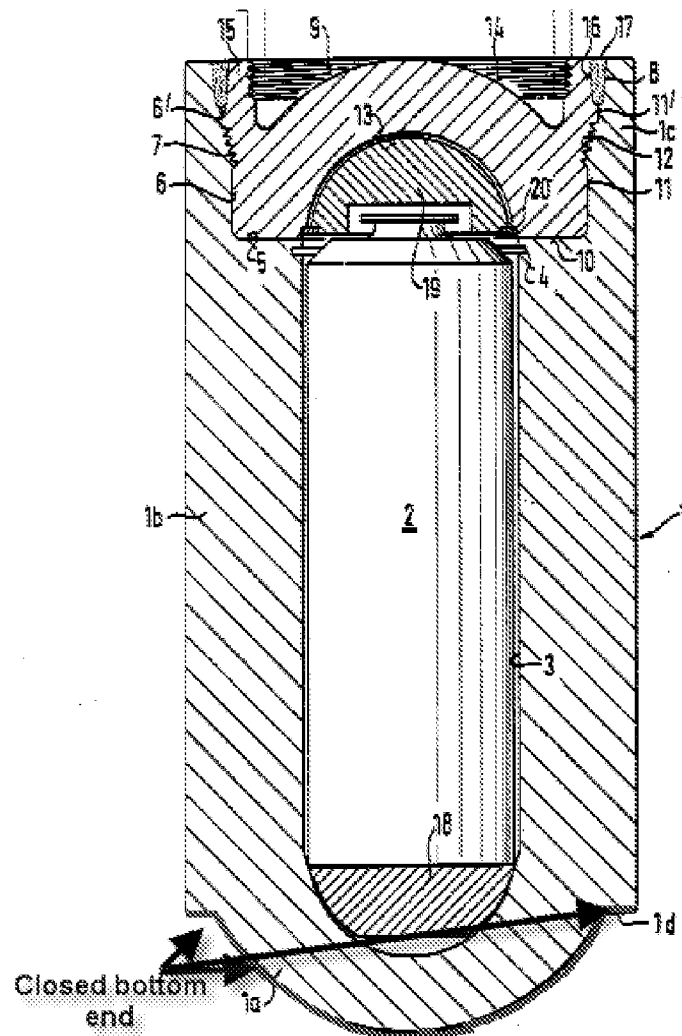
Regarding claim 15, Bienek discloses that the hazardous waste is nuclear waste (column 1 lines 5-10).

Regarding claim 17, Bienek discloses that the end face of the axial wall of said body is substantially perpendicular to the central axis (figures 1-2 and shown below).

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Regarding claim 18, Bienek discloses that an outer surface of the at least one axial wall of the body and an outer surface of the at least one end wall of the cover are substantially coplanar (figure 2 and below).





3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bienek et al. (4,738,388) and Schroeder et al. (4,673,814) as applied to claim 7 above, and further in view of Gordon (4,831,233).

Regarding claim 5, Bienek does not specifically disclose the type of welding for the joining the lid and the body. Schroeder discloses the use of gas-shielded arc welding to weld the cover onto the vessel (column 3 lines 26-51). Schroeder does not specifically state plasma jet welding and limiting the internal overpressure of the

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container. However, Gordon does state the use of tungsten inert gas welding as a remote controlled welding operation (column 1 lines 12-16). It is commonly known in the art that tungsten inert gas welding (TIG) is a form of plasma jet welding. To one skilled in the art at the time of the invention it would have been obvious to use tungsten inert gas, as stated by Gordon, for the weld on the vessel because an inert gas such as tungsten provides greater control over the weld to prevent overpressure and has a strong, high quality weld needed to prevent leakage between the cover and body.

4. Claims 1-4, 7-9, 15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bienek et al. (4,738,388) in view of Rolle (2002/0050480) and Schroeder et al. (4,673,814).

The following rejection is a back up to the rejection above (numbered paragraph 2) in case the end face is not taken to be parallel to the closed bottom end.

Regarding claim 1, Bienek discloses a method of producing a closed container with a tight and mechanically strong seal by fastening together a metal body 1 having a central axis (shown below) with a shape that is of cylindrical, said body having an open top axial end, a closed bottom end, and a base with at least one axial wall between the open end and the closed bottom end and being parallel to said central axis (shown below and figures 1-2 and column 5 lines 38-43). Bienek discloses that the at least one axial wall having an end face opposite the closed bottom end and a metal cover having an axis coaxial with said central axis of said body and at least one end wall parallel to said central axis to be positioned at said top axial end of said body facing said at least

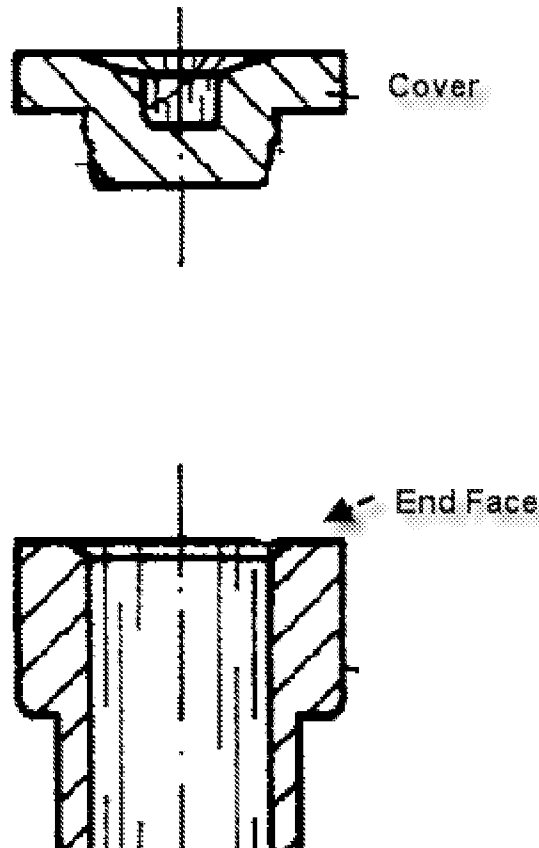
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one end face of the axial wall of said body (shown below and figures 1-2). Bienek discloses following two steps in succession, carried out in a hostile environment (radioactive waste; column 1 lines 5-11): docking said body 1 and said cover 9 so that said end face of the axial wall of said body in the vicinity of said open top thereof and said end wall of said cover face each other and are maintained in contact; and producing a continuous penetrative weld over an entire thickness of the end face of the metal body and an entire thickness of the at least one end wall of the metal cover and about an entire periphery of said cover and said body at the ends of their respective walls which are maintained in contact (figures 1-2, shown below and column 4 lines 41-66).

Bienek does not specifically disclose that the at least one axial wall has an end face parallel the closed bottom end. However, Rolle does disclose a container with an axial wall with an end face that would be parallel to the closed bottom end of Bienek (shown below). To one skilled in the art at the time of the invention it would have been obvious to have an end face parallel to the closed bottom end so that the cover/lid and the container create a tight seal to prevent any leakage of material before welding.

Bienek does not specifically disclose that the method is carried out by remote control. However, Schroeder discloses the use of a remote controlled fillet welding operation for sealing radioactive material in a container (column 3 lines 52-60). To one skilled in the art at the time of the invention it would have been obvious to use a remote control for carrying out the method of sealing a container holding radioactive waste to prevent human contact with the radioactive waste during the welding process.

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Regarding claim 2, Bienek discloses that the first step comprises a guided approach of said cover and said body, a docking guide being arranged in the internal structure of one of said cover and said body (shown below and figures 1-2).

Regarding claim 3, Bienek discloses exerting a force on at least one of the ends of the walls of said body and said cover to thereby maintain said body and said cover in contact during welding (column 1 lines 50-66). Bienek discloses a weld seam, but does not specifically disclose that the weld is produced without spot welding. However, to one skilled in the art at the time of the invention it would have been obvious to not use spot welding to ensure a continuous seal to create a leak proof container.

Regarding claim 4, Bienek discloses that the weld is produced without a filler metal (column 3 lines 47-49).

Regarding claim 7, While Bienek does not mention the position of the vessel during welding, to one skilled in the art at the time of the invention it would have been obvious to have the vessel in the vertical position to prevent the radioactive contents in the container from leaching out.

Regarding claim 8, Bienek does not disclose that the container is fixed and the welding head is rotated around the container at the level of the ends of the walls maintained in contact. However, Schroeder discloses a remotely-controlled programmed robot and automatic welding equipment which would allow the welding head to be rotated around the said container at the level of the ends of the walls maintained in contact (column 3 lines 27-60). To one skilled in the art at the time of the invention it would have been obvious to keep the container fixed and move the weld head around the container to prevent movement of the radioactive material in the container and to prevent movement of the lid and body during the welding process.

Regarding claim 9, Bienek discloses that the method is carried out to produce a closed container for confined packaging and storage of hazardous waste (column 1 lines 5-10).

Regarding claim 15, Bienek discloses that the hazardous waste is nuclear waste (column 1 lines 5-10).

Regarding claim 17, Bienek discloses that the end face of the axial wall of said body is substantially perpendicular to the central axis (figures 1-2 and shown below).

Regarding claim 18, Bienek discloses that an outer surface of the at least one axial wall of the body and an outer surface of the at least one end wall of the cover are substantially coplanar (figure 2 and below).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bienek et al. (4,738,388), Rolle (2002/0050480) and Schroeder et al. (4,673,814) as applied to claim 7 above, and further in view of Gordon (4,831,233).

Regarding claim 5, Bienek does not specifically disclose the type of welding for the joining the lid and the body. Schroeder discloses the use of gas-shielded arc welding to weld the cover onto the vessel (column 3 lines 26-51). Schroeder does not specifically state plasma jet welding and limiting the internal overpressure of the container. However, Gordon does state the use of tungsten inert gas welding as a remote controlled welding operation (column 1 lines 12-16). It is commonly known in the art that tungsten inert gas welding (TIG) is a form of plasma jet welding. To one skilled in the art at the time of the invention it would have been obvious to use tungsten inert gas, as stated by Gordon, for the weld on the vessel because an inert gas such as tungsten provides greater control over the weld to prevent overpressure and has a strong, high quality weld needed to prevent leakage between the cover and body.

Allowable Subject Matter

6. Claim 16 is allowed.

7. The following is an examiner's statement of reasons for allowance: the Prior Art of record failed to teach or suggest all the limitations of claim 16 including a docking guide having a groove where the groove included a degassing chimney.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

8. Applicant's arguments filed 9/4/2009 have been fully considered but they are not persuasive.

9. The Applicant argues that Bienek does not disclose a penetrative weld over the whole thickness of the wall in question.

As can be seen in the Bienek figure above (figure 2), there is a penetrative weld over the whole thickness of the wall in question. The penetrative weld is through the entire thickness at that specific location of the container and cover.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIN B. SAAD whose telephone number is (571)270-3634. The examiner can normally be reached on Monday through Thursday from 8am-5pm Eastern time.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Ward can be reached on (571) 272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. B. S./
Examiner, Art Unit 1793
10/5/2009

/Jessica L. Ward/
Supervisory Patent Examiner, Art Unit 1793